Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
REGIONET WIRELESS LICENSEE, LLC	)	RM-9664
Amendment of Part 80 of the Commission's Rules Concerning Automated Maritime Telecommunications System Stations	)	

To: The Commission

OPPOSITION TO PETITION FOR RULE MAKING

The Dispatch Broadcast Group, on behalf of affiliated stations WTHR(TV), Channel 13, Indianapolis, Indiana and WBNS-TV, Channel 10, Columbus, Ohio by its undersigned attorney, hereby submits its Opposition to the Petition for Rule Making ("Petition") filed by RegioNet Wireless Licensee, Inc. ("RegioNet"), apparently a successor-in-interest to Fred Daniel d/b/a Orion Telecom. As demonstrated more fully below, RegioNet's Petition should be denied because it is not supported by adequate evidence and woefully fails to demonstrate that the requested action is in the public interest as opposed to RegioNet's private interests.

RegioNet's Petition urges the Commission to undertake a rulemaking proceeding to reduce the interference protections that Automated Marine Telecommunications System ("AMTS") licensees are required to provide to television stations operating on channels 10 and 13. Petition at 10. RegioNet's Petition acknowledges the Commission's longstanding concerns about the very real interference threat that AMTS operations present to full service television

operations on channels 10 and 13 due to the very close proximity of their respective operating frequencies. AMTS stations are authorized to operate on 217-218 MHz (base stations) and 219-220 MHz (mobile stations) while television channel 13 operates at 210-216 MHz and television channel 10 operates on 192-198 MHz. Despite this real interference threat, RegioNet's Petition urges the Commission to commence a rulemaking that will reduce the interference analysis currently required of AMTS operators and because of the improved performance of NTSC receivers, a fact it attempts to demonstrate by relying on a recent study of 53 NTSC receivers. Petition at 7-9 & Exhibit 1.

For a variety of reasons, RegioNet's Petition fails to support the requested action and should, accordingly, be denied. First and foremost, RegioNet's Petition and its supporting evidence about current receiver performance completely ignores the performance characteristics of DTV receivers. This omission, by itself, warrants dismissal of the Petition. As the Commission well knows, the broadcast industry has recently embarked on a transition to digital television, a transition with a Congressionally mandated end date of December 31, 2006. RegioNet's Petition almost completely ignores this fact and wholly fails to provide any substantive evidence on the performance characteristics of DTV receivers. The Commission only recently confirmed the primary status of DTV stations over NTSC stations, confirming that it would deny any NTSC modification application that would result in predicted interference to a DTV station or

allotment.[1] RegioNet's failure to document the impact of AMTS service on the performance of DTV receivers similarly warrants dismissal here.

RegioNet's failure to address the performance characteristics of DTV receivers is no small matter. The Sinclair Broadcast Group has recently made much over the relatively poor performance of DTV receivers using the FCC's mandated 8 VSB DTV modulation standard inside buildings and homes that do not have outside antennas. See, e.g., "Broadcaster Seeks Change in Digital TV Format," New York Times, pp. C1, C6, July 12, 1999. Given these demonstrated problems with inside DTV reception, the Commission would violate its obligation to act in the public interest if it granted RegioNet's Petition without adequate documentation that the AMTS operations posed no further interference threat to DTV reception, including most specifically indoor reception. For this reason, RegioNet's Petition should be denied.

Second, as demonstrated in the accompanying technical statement, there are several flaws in the supporting technical materials supplied by RegioNet. RegioNet's reported NTSC receiver test results completely ignored the impact of cross-modulation interference, improperly used average 1999 NTSC receiver performance data rather than data from the poorest NTSC receivers (as was done in a definitive study relied upon by the Commission in 1982 when it authorized AMTS service), and failed to apply the proper criteria for noting interference to NTSC receivers. Engineering Statement of Cohen, Dippell & Everist at 2-4 (Exhibit 1 attached hereto).

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[1] See, Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Second Memorandum Opinion & Order on Reconsideration of the Fifth and Sixth Report and Orders, MM Docket 87-268, FCC 98-315, ¶ 32, released December 18, 1998.

Each of the flaws understates the amount of interference that an AMTS station causes to an NTSC. As noted in the Cohen, Dippell & Everist Technical Statement, unless and until RegioNet completes a comprehensive series of cooperative tests on both NTSC and DTV receivers, any Commission action on its Petition would be premature. Id. at 5. RegioNet's failure to provide reliable evidence to support its Petition provides a separate basis for its denial.

Finally, RegioNet has woefully failed to demonstrate that the instant Petition is in the public interest rather than its own private interest. In particular, the Commission should summarily reject RegioNet's absurd suggestion that it is somehow interested in creating "more competition in the AMTS field," (Petition at 5; see id. at 9), the only suggestion that remotely comes close to addressing the public's interest in the RegioNet Petition. As demonstrated below, RegioNet, like its predecessor-in-interest, Orion Telecom, is instead seeking to make it easier to use AMTS spectrum to provide land-based cellular telecommunications service, an objective that will undoubtedly serve its own private interest but one that fails to conform to the AMTS service originally found by the Commission to be in the public interest.[2]

RegioNet's predecessor, Orion Telecom, demonstrated this grand plan by repeatedly proposing to serve small inland waterways throughout the country where there is no need for AMTS service. For example, in Indianapolis, Orion proposed to provide AMTS service primarily to the Eagle Creek Reservoir, a small 1350 acre reservoir which has approximately 750

[2] The Petition makes clear that RegioNet, like Orion Telecom before it, is and will continue to be controlled by Fred Daniel. Petition at 1 & n.1.

very small watercraft between the months of April and October, watercraft that are used for recreational boating, water skiing and recreational fishing. See WTHR's Opposition to Petition for Reconsideration filed by Fred Daniel d/b/a Orion Telecom (September 14, 1998) (attached hereto as Exhibit 2).[3] Notwithstanding Orion's purported intent to provide Marine Telecommunications Service to the Reservoir, Orion selected a site that was 20 miles due east of the Reservoir with an directional antenna that did not have its main lobe pointed to the Reservoir itself. Id. at 3-4. As noted by Dispatch in opposing Orion's application, Orion's intent clearly was to provide cellular telecommunications service to Indianapolis area. For these and other reasons, the Wireless Telecommunications denied Orion's application to provide AMTS service in and around Indianapolis.

The Commission should also reject outright RegioNet's Petition here. RegioNet's self-serving suggestion that the engineering studies required of AMTS operators to protect television stations operating on channels 10 and 13 are somehow the reason that there are "only" three AMTS licensees is simply baseless. Petition at 9. Dispatch submits that there are "only" 3 AMTS licensees because there is a limited demand for the legitimate Marine Telecommunications Service authorized by the Commission -- a service intended to provide integrated marine telecommunications service along the Mississippi River, the Great Lakes and other significant

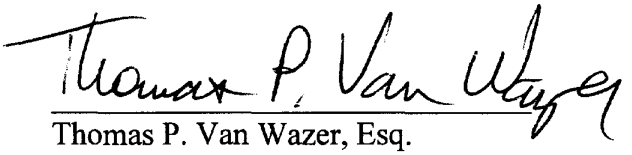
[3] The only other body of water that Orion proposed to provide AMTS service to in the Indianapolis application was the Geist Reservoir, a small, 1800 acre reservoir with a seasonal population of approximately 900 small pleasure watercraft. Id. at 3. Dispatch's affiliated station, WTHR, presented unrefuted evidence from officials at the only marina serving the Geist Reservoir that portable cellular and marine radio service were more than adequate to serve the needs of the users. Id.

interior waterways. Should Orion believe it is in the public interest to provide additional cellular competition, it should file a Petition for Rulemaking seeking to have other spectrum assigned for that purpose. Dispatch opposes Orion's efforts here to circumvent that process by seeking to provide such competition on a channel so close to its television frequencies.

Accordingly, for the reasons set forth above, Dispatch submits that RegioNet's Petition for Rulemaking should be denied. RegioNet has clearly failed to demonstrate that the requested action is in the public interest, rather than its own private interest.

Respectfully submitted,

DISPATCH BROADCAST GROUP



Thomas P. Van Wazer, Esq.

Sidley & Austin
1722 Eye Street, N.W.
Washington, D.C. 20006

Its Attorney

Dated: July 16, 1999

Exhibit 1

ENGINEERING STATEMENT
ON BEHALF OF
DISPATCH BROADCAST GROUP
IN OPPOSITION TO
REGIONET'S
PETITION FOR RULE MAKING

JULY 1999

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

Warren M. Powis, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer of the University of Canterbury, New Zealand, a Registered Professional Engineer in the District of Columbia, the State of Virginia, the State of South Carolina, and Vice President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005; previously employed for 15 years with the New Zealand Broadcasting Corporation; a member of the Institution of Professional Engineers New Zealand (IPENZ), the Association of Federal Communications Consulting Engineers (AFCCE), and the National Society of Professional Engineers (NSPE).

That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and,

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

Warren M. Powis
District of Columbia
Professional Engineer
Registration No. 8339

Subscribed and sworn to before me this 15th day of July, 1999.

Notary Public

My Commission Expires: 7/28/2003

This engineering statement has been prepared on behalf of Dispatch Broadcast Group in support of its Opposition to the Petition for Rule Making ("Petition") filed by RegioNet Wireless License, LLC, a subsidiary of Orion Telecom. The petition requested that the Commission reduce the regulatory burdens placed on applicants for Automated Marine Telecommunications System ("AMTS") stations by reducing the interference protections currently provided to television stations operating on Channels 10 and 13.

AMTS stations, which operate on 217 to 218 MHz (base stations) and 219-220 MHz (mobile stations), have the potential to interfere with the off-air reception of television receivers tuned to 210-216 MHz TV Channel 13 (adjacent-channel interference) and to 192-198 MHz TV Channel 10 (half I.F. beat effects). The methods of evaluating the potential for interference were developed by R. Eckert of the FCC's Office of Science and Technology in OST Technical Memorandum FCC/OST TM82-5, July 1982.

Table I of TM82-5 specified the interference protection ratios to TV Channels 13 and 10 for the poorest observed TV receive performance among its samples of five different receiver types. Table I, therefore, provided a reasonable basis for protecting all TV receivers.

RegioNet 1999 Tests

RegioNet attached an exhibit to its Petition which detailed recent interference tests to TV Channel 13 reception from a single 1 KHz–FM–modulated AMTS signal, conducted by Professor A. E. Hull of California State Polytechnic University, Department of Electrical and Computer Engineering. The Hull report indicated that observations were made on 53 television receivers tuned

to Channel 13 with the single AMTS signal operated in 0.5 MHz steps between 216-220 MHz to determine the AMTS signal level that would produce "just perceptible interference".

By Hull's definition, University staff considered "just perceptible" interference to occur when the visual signal of Channel 13 appeared minimally degraded from a normal viewing distance of 10-12 feet. The screen sizes of the TV receivers under test varied from 9 inches to 51 inches.

Hull's tests on 53 receivers were performed while receiving the Channel 13 programming of KCOP, Los Angeles, California. Only 11 of those 53 receivers were tested with an off-air signal. The remaining 42 receivers tested received the KCOP programming via cable television systems.

Hull's test setup imported the Channel 13 signal (cable TV-or-antenna) attenuated and combined with single AMTS interferer via a matching pad to an A-B switch. The A-B switch fed either the Sadelco signal meter or the television receiver under test. It is noted that the Sadelco meter was configured to measure the average voltage in a 4 MHz band of Channel 13 (210-216 MHz).

Hull noted on Page 6 that the cable TV power received in some homes in the Placenta, Fullerton, Arcadia, and Irvine areas ranged from -68 to -78 dBm.

Comments on RegioNet's Report

There are several shortcomings with RegioNet's technical submission.

The Commission in TM82-5 chose to use the poorest observed TV receiver performance out of 5 receiver types as a basis for proper protection of Channel 10 and Channel 13 reception against AMTS interference. RegioNet's use of "average" 1999 data is, therefore, inappropriate.

RegioNet's own measurement data demonstrates that its poorest receiver is actually 2 dB to 4 dB worse than the poorest receiver type documented by the FCC in its 1975 tests at the AMTS

frequencies 217.0 and 217.5 MHz. RegioNet claim of a 25 to 38 dB improvement in performance is, therefore, invalid.

RegioNet's recent measurements were taken with a single interferer. Actual AMTS operations consist of multiple carriers which extend from 217.0 to 217.5 and 217.5 to 218.0 MHz. The impact of cross modulation effects from multiple carriers on TV reception has not been addressed.

RegioNet utilized a "normal" viewing distance of 10 to 12 feet for a wide range of screen sizes of 9 to 51 inches for its determination of minimal degradation. Since the acuity of the normal eye is 1/60 of a degree, it will be unable to resolve the full picture content of small television screens at this distance.

For the NTSC 4:3 screen ratio, the optimum viewing distances for various screen diameters are as follows:

TV Screen Diameter inches	Optimum Viewing Distance feet
9	3.2
13	4.7
19	6.8
27	9.7
31	11.0
51	18.0

Accordingly, RegioNet's conclusions based on its test methodology are highly suspect. The human eye can resolve less than 50% of the vertical and 50% of the horizontal resolution (25% of the viewing area) of the 9, 11, and 13 inch receivers; over one-third of the receivers documented by RegioNet. Further, only 9 of 47 receivers documented (27 inch diameter or greater) are properly viewable at 10 feet viewing distance.

Since the FCC has mandated the transition to digital television (DTV), tests on NTSC reception and DTV reception using the new generation of digital television receivers should also be undertaken. Appropriate cooperative tests could be undertaken at a site such as the Advanced Television Test Center ("ATTC") in Alexandria, Virginia, using expert viewers. Potential interference, color beat, and other effects can be researched and tested using ATTC's existing test-bed setup conducted at optimum viewing distances for existing NTSC and DTV receivers.

RegioNet claims that the Eckert report is 18 dB conservative on the difference between the polarization of TV and AMTS antennas. Depolarization of signal sources in urban and heavily treed areas results in reduced ability to reject unwanted interfering signals. Furthermore, TV Channel 13 stations can operate with circular polarization resulting in no cross-polarization advantages.

AMTS transmitter sites should be located away from urban areas. RegioNet's example of Orion's AMTS Santiago Peak, California, site is a good example; rurally located and well removed from any significant population.

AMTS transmitter sites can also be collocated with TV Channel 13 stations including low power television ("LPTV") stations. If LPTV stations utilize directional antennas, an associated

directional AMTS station should be workable at an appropriate AMTS power level with a workable ratio to the LPTV power level.

There are no means for TV viewers to identify or recognize the source of AMTS interference to Channel 13 reception. Viewers simply "live with it" or tune to another channel. A suggested revision of the household notification procedure for AMTS stations is as follows.

0 to 5 miles	All Households
5 to 7 miles	50% of all households
7 to 10 miles	25% of all households

Until a comprehensive range of testing on NTSC and DTV receivers is completed and the above shortcomings are addressed and corrected, any action by the FCC on RegioNet's Petition is premature.

Exhibit 2

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
FRED DANIEL D/B/A ORION TELECOM	)	File No. 850305
	)	
For Automated Maritime Telecommunications Systems at Indianapolis, Indiana	)	

To: Chief, Wireless Telecommunications Bureau

OPPOSITION TO PETITION FOR RECONSIDERATION

VideoIndiana Inc. ("VideoIndiana"), licensee of WTHR(TV), Channel 13 in Indianapolis, by its undersigned attorney, hereby files its Opposition to the above-captioned Petition for Reconsideration filed by Fred Daniel d/b/a Orion Telecom ("Orion") seeking a grant of the Orion's Automated Maritime Telecommunications System ("AMTS") to serve Indianapolis, Indiana. FCC File No. 850305. As demonstrated in VideoIndiana's original Petition to Deny and subsequent Reply in Support of the Petition to Deny, the proposal evidenced in Orion's Application to serve the Geist Reservoir and Eagle Creek Reservoir near Indianapolis is unnecessary and a sham orchestrated to permit Orion to provide two-way mobile service to mobile vehicles on land and in the air but not primarily on navigable waterways as intended by the Commission.

Orion should not be allowed to operate its proposed AMTS system allegedly to serve Geist Reservoir and Eagle Creek Reservoir when Orion has made no demonstration of the need for that service and instead clearly intends to make the primary use of it system the provision of two-way mobile communications service to land-based customers. In adopting rules providing for AMTS systems, the FCC has made clear that such systems were intended to meet the needs of vessels traveling on large rivers, gulfs or inland waterways where other ship-to-shore facilities were not adequate.[1] Moreover, while the FCC has indicated that, by waiver, it will permit the excess capacity of AMTS systems to be used to serve vehicles on land on an ancillary basis, this ancillary service must be offered to a "limited number of vehicles on a strictly secondary basis."[2] The facts surrounding Orion's proposal make it clear that Orion cannot possibly intend to serve Eagle Creek Reservoir and the Geist Reservoir with the proposed AMTS station on a primary basis. Instead, the only logical conclusion is that the proposed system is a sham, being set up to provide service to land-based vehicles.

As demonstrated in the attached declaration of Al Grossniklaus, WTHR's chief engineer (a copy of which was filed with VideoIndiana's Reply in Support of Its Petition to Deny), the Eagle Creek Reservoir is a small 1350 acre reservoir on the west side of

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[1] See 47 C.F.R. 80.475 (discussing coverage requirements for AMTS systems); Fred Daniel d/b/a Orion Telecom, 11 FCC cd. 5764, 5767 (1996).

[2] See Request for Waiver of the Requirements in Section 80.453, DA 97-564, released March 17, 1997; Amendment of Part 81 of the Rules to Permit Public Coast Stations to Serve Vehicles on Land, 1 FCC Rcd. 1312 (1986).

Indianapolis.[3] During the months between April and October, about 750 very small watercraft, including weekend boaters, water skiers and fishermen use Eagle Creek for recreational pleasure; there are no boats bigger than 9 yards long. There is no commercial activity on the reservoir, which is occasionally used for scholastic rowing trials. Officials responsible for overseeing the reservoir have indicated that, when necessary, the small pleasure craft seasonally using Eagle Creek have adequate access to cellular and other marine radio coverage. The Geist Reservoir similarly is a small 1800-acre reservoir, with a seasonal population of approximately 900 small pleasure watercraft. There is no boating on the reservoir during the winter months except for several iceboats. The small sailboats, skiing boats and fishing boats used on the reservoir do not exceed 10 yards in length. Officials of the Geist Lake Marina, the only marina operating on the Reservoir, also believe that portable cellular and VHF marine radio service are quite adequate to serve the seasonal recreational boaters.

Given the very limited size and use of the two reservoirs, as well as the small recreational boats seasonally used on the reservoirs, Orion's failure to demonstrate any need for its AMTS service is not surprising. These facts demonstrate that Orion simply cannot be credited with the claim in underlying Application that it will place 600 maritime mobile units in service. Instead, these facts and the location of Orion's facility make clear that Orion has specified the Eagle Creek and Geist Reservoirs as a pretext for offering land-based mobile service on much more than an ancillary, or strictly secondary, service. Orion's proposed site

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[3] Until the filing of its Opposition to VideoIndiana's Petition to Deny, Orion had not identified the Eagle Creek Reservoir in its Application.

is 20 miles due east of Eagle Creek with an antenna that has its main directional lobe point north (not directed to the Creek itself). Moreover, the antenna's height above ground is approximately 200 feet, making it difficult to serve the reservoir, the surface of which is 100 to 150 feet lower than much of the surrounding terrain. Given these circumstances, Orion has failed to demonstrate that its proposed service is consistent with the FCC's rules regarding AMTS, much less necessary to serve navigable inland waterways. The Commission must not allow Orion to circumvent the AMTS rules on the pretext of serving two small reservoirs that are used for limited boating during several months of the year, especially where such a misuse of authorized facilities will interfere with off-the-air television reception by the public.[4]

[4] Orion has recognized that its proposed operation is predicted to cause interference to the reception of WTHR to approximately 17,000 residents in Indianapolis. See Orion's Opposition to VideoIndiana Petition to Deny at 2.

FOR THE FOREGOING REASONS, VideoIndiana respectfully requests that Orion's Petition for Reconsideration BE DENIED.

Respectfully submitted,

VIDEOINDIANA, INC.

By: Thomas P. Van Wazer

Thomas P. Van Wazer
Sidley & Austin
1722 Eye Street, N.W.
Washington, D.C. 20006
202-736-8000

Its Attorney

Dated: September 14, 1998

DECLARATION OF AL GROSSNIKLAUS

I, Al Grossniklaus, under the penalty of perjury, do hereby declare and state the following:

1. I am Director of Engineering and Operations for Station WTHR(TV), Channel 13, Indianapolis, Indiana. I am also a resident of Indianapolis. I live across the road from Geist Reservoir, and have sailed a small 19-foot sailboat on that reservoir for several years.

2. In compiling some of the facts included in this declaration I have spoken with Mr. Kent Duckwall, who is the manager of the Geist Lake Marina, the only marina serving the Geist Reservoir. I have also spoken with Mr. Paul Younger of the Eagle Creek Park Office.

3. The Geist Reservoir is the reservoir used by the Indianapolis Water Company. It is approximately 1800 acres in size and has a seasonal population of about 900 small pleasure watercraft during that period from April to October. There is no boating on the lake during the winter months between November and March, except for approximately ten iceboats. There are no commercial boats that operate on the reservoir. Instead, the small pleasure craft are comprised of summertime weekend boaters who sail, water ski or fish. The boats do not exceed 30 feet in length, and are generally used for several hours of recreation.

4. In speaking with Mr. Duckwall, I learned that the recreational boaters have access to cellular service because the cellular companies serving the area have cells that adequately cover the reservoir. Portable cellphones thus can be used on these craft. Mr. Duckwall also indicated that VHF marine radio service is available and an adequate alternative to the use of cellphones if it were ever necessary.

5. The Eagle Creek Reservoir is also a small reservoir, consisting of approximately 1350 acres. Approximately 750 small pleasure watercraft use Eagle Creek on the same seasonal basis as Geist Reservoir is used. The boats used on Eagle Creek Reservoir do not exceed 26 feet in length or 10 horsepower. The only other activity on Eagle Creek is the AAU rowing trials. There is no commercial activity on the reservoir.

6. In speaking with Mr. Younger, I learned that the coverage of cellular service from the local cellular service providers extends over the Eagle Creek Reservoir. Additionally, VHF marine radio coverage also is available, if necessary for communications on the reservoir.

7. I have reviewed the engineering specifications for the Automated Maritime Telecommunications Service station proposed by Orion Telecom. The proposed site is located 20 miles due <u>east</u> of Eagle Creek, at 200′ elevation above ground and with the antenna's main directional lobe pointed <u>north</u>. Eagle Creek

Reservoir's surface is 100 to 150 feet lower than much of the surrounding terrain, as a great deal of the reservoir is below hills and cliffs. Given these facts, it is my opinion that the proposed AMTS shore station will not cover Eagle Creek Reservoir well. In fact, there are sites much better situated to cover both Geist Reservoir and Eagle Creek Reservoir.

The foregoing is true and correct to the best of my knowledge and information.

Al Grossnicklaus

Date: APRIL 7, 1997

CERTIFICATE OF SERVICE

I, Tami Smith, hereby certify that on this 14th day of September, 1998, I served a copy of the foregoing Opposition to Petition for Reconsideration to the following person by placing a copy in the United States Mail, first-class, postage prepaid:

Dennis C. Brown, Esq.
Brown and Schwaninger
1835 K Street, N.W.
Suite 650
Washington, D.C. 20006

Tami Smith

CERTIFICATE OF SERVICE

I, Tami Smith, hereby certify that on this 16th day of July 1999, I caused a copy of the foregoing Opposition to Petition for Rule Making, to be sent via first class mail, postage prepaid to the following:

Dennis C. Brown
126/B North Bedford Street
Arlington, VA 22201

Tami Smith